

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/07246

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ G02B6/00, G02B6/245

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ G02B6/00, G02B6/245, H02G1/12

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2000

Kokai Jitsuyo Shinan Koho 1971-2000 Jitsuyo Shinan Toroku Koho 1996-2000

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No.51528/1989 (Laid-open No.142803/1990) (1) (NEC Corporation), 04 December, 1990 (04.12.90), page 1, lines 7 to 10; Fig. 1 (Family: none)	7 1-5,8-12
Y	JP, 57-76503, A (Fujitsu Limited), 13 May, 1982 (13.05.82), page 2, upper left column, line 8 to page 2, upper right column, line 6; Figs. 1, 5 (Family: none)	1-5,8,11
Y	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No.28669/1989 (Laid-open No.119605/1990) (Fujikura Ltd.), (3) 26 September, 1990 (26.09.90), page 1, line 17 to page 2, line 7; Figs. 6 to 7 (Family: none)	1-5

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
11 December, 2000 (11.12.00)Date of mailing of the international search report
19 December, 2000 (19.12.00)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 990055	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP00/07246	International filing date (day/month/year) 19 October 2000 (19.10.00)	Priority date (day/month/year) 20 October 1999 (20.10.99)
International Patent Classification (IPC) or national classification and IPC G02B 6/00, 6/245		
Applicant SHOWA ELECTRIC WIRE & CABLE CO. LTD		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>2</u> sheets.</p>	
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>	

Date of submission of the demand 10 April 2001 (10.04.01)	Date of completion of this report 05 July 2001 (05.07.2001)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP00/07246

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages _____ 1-10 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages _____ 2.3 _____, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____ 1,4-8,13 _____, filed with the letter of _____ 28 June 2001 (28.06.2001)
- ☒ the drawings:
 pages _____ 1-15 _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☒ the claims, Nos. _____ 9-12 _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/JP 00/07246

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-8, 13	YES
	Claims		NO
Inventive step (IS)	Claims	2, 3, 7, 8	YES
	Claims	1, 4-6, 13	NO
Industrial applicability (IA)	Claims	1-8, 13	YES
	Claims		NO

2. Citations and explanations

Document 1: Microfilm of the specifications and drawings annexed to the application of Japanese Utility Model Application No. 51528/1989

① (Laid-open No. 142803/1990) (NEC Corp.), 4 December 1990 (04.12.90), p. 1, lines 7-10, Fig. 1

Document 2: ② JP, 57-76503, A (Fujitsu Ltd.), 13 May 1982 (13.05.82), p. 2, upper left column, line 8 to p. 2, upper right column, line 6, Fig. 1, Fig. 5

Document 3: Microfilm of the specifications and drawings annexed to the application of Japanese Utility Model Application No. 28669/1989

③ (Laid-open No. 119605/1990) (Fujikura Ltd.), 26 September 1990 (26.09.90), p. 1, line 17 to p. 2, line 7, Fig. 6-7

Document 4: Microfilm of the specifications and drawings annexed to the application of Japanese Utility Model Application No. 66540/1989

④ (Laid-open No. 6608/1991) (NEC Corp.), 23 January 1991 (23.01.91), p. 2, lines 1-7, Fig. 3

Document 5: ⑤ JP, 10-307213, A (Asahi Glass Co., Ltd.), 17 November 1998 (17.11.98), paragraph [0008],

Fig. 2

Claim 1

The invention described in Claim 1 and the invention disclosed in Document 1 differ on the following points (1) and (2). (1) While the edge of the cutting blade in the former is substantially perpendicular to the side, such is not the case in the latter. (2) While a cutting blade and a receiving part approach one another in the former, a pair of cutting blades approach one another in the latter. However, Document 2 discloses a feature wherein the edge of a cutting blade is flat (see flat edge (6') on separating blade (6)). Moreover, Document 3 discloses a feature wherein a cutting blade and a receiving part approach one another. Therefore, the invention described in Claim 1 does not involve an inventive step in the light of Documents 1 to 3.

Claim 4

Document 3 discloses the provision of an optical fiber guiding means (see triangular notch part (3a)).

Claim 5

The invention described in Claim 5 and the invention disclosed in Document 1 differ on the following point. While the edge of the cutting blade in the former is substantially perpendicular to the side, such is not the case in the latter. However, Document 2 discloses a feature wherein the edge of a cutting blade is flat (see flat edge (6') on separating blade (6)). Therefore, the invention described in Claim 5 does not involve an inventive step in the light of Documents 1 and 2.

Claim 6

Document 2 discloses the provision of a guiding

means for a cutting blade (see recessed stopping plate (7)).

Claim 13

The invention described in Claim 13 and the invention disclosed in Document 4 differ on the following point. While a guiding groove into which a cutting blade is introduced is formed in the upper surface of a receiving part in the former, it is unclear whether or not such a guiding groove is formed in the latter. However, Document 5 discloses the formation of a guiding groove into which a cutting blade is introduced (see thin blade guiding groove (5)). Therefore, the invention described in Claim 13 does not involve an inventive step in the light of Documents 4 and 5.

Claims 2, 3, 7, and 8

Document 1 shows the general state of the art in this technical field. Although Document 1 does disclose an optical fiber primary coating removal tool having a pair of cutting blades which mutually approach one another, said blades being made of synthetic resin, none of the documents cited in the international search report, nor any of the documents newly cited in this international preliminary examination report, discloses or suggests features wherein the edge of a cutting blade is substantially perpendicular to the side, the thickness of the cutting blade is 0.06-1 mm, and the modulus of elasticity of the cutting blade is 900-20,000 MPa.